UNITED STATES DISTRICT COURT
DISTRICT OF PUERTO RICO

In re: THE FINANCIAL OVERSIGHT AND MANAGEMENT BOARD FOR PUERTO RICO, as representative of THE COMMONWEALTH OF PUERTO RICO, *et al.*, Debtors.	PROMESA Title III No. 17 BK 3283-LTS (Jointly Administered)
In re: THE FINANCIAL OVERSIGHT AND MANAGEMENT BOARD FOR PUERTO RICO, as representative of PUERTO RICO SALES TAX FINANCING CORPORATION, Debtor.	PROMESA Title III No. 17 BK 3284-LTS

DECLARATION OF MARK ELLIOTT, *PRO SE*, IN OPPOSITION TO ENTRY OF AN ORDER APPROVING THE SECOND AMENDED TITLE III PLAN OF ADJUSTMENT OF PUERTO RICO DALES TAX FINANCING CORPORATION.

I, MARK ELLIOTT, hereby declare pursuant to 28 U.S.C. 1746 as follows:

1. I am the founder of the Registered Investment Advisory Firm Elliot Asset Management, a Boston-based independent investment advisory firm. I have a BS in Molecular Biology, Magna Cum Laude, from the College at Charleston. I attended Medical School at Dartmouth College and completed graduate coursework in Business Harvard University's Executive Education Program.

2. I have passed the following industry exams and obtained the following licenses: Series

63, Series 65, and Series 66.

3. I have been investing professionally for family and friends informally since 1999, and I founded Elliott Asset Management in 2006, which acts in a fiduciary capacity providing hedge fund style investments to individuals at a low cost.

4. Elliott Asset Management has advised many of the world's largest financial entities, including The Gartmore Group, Goldman Sachs, The China Pilot Free Trade Zone and Economic Reform Team, provided analysis to C level executives at Credit Agricole, People's Daily (Official Party Newspaper of the People's Republic of China) and other small and large business entities from family enterprises to those with 50,000+ employees.

5. I have been featured in and have been interviewed for pieces in various publications including The Wall Street Journal, The US News and World Report, Investors Business Daily, Yahoo Finance, The College Investor, and Beijing Television.

6. My firm has a proven track record of success; our business model has beaten over 99% of investment funds of all sectors and types over the past ten years.

7. I have submitted an Objection to the Entry of an Order Approving the Second Amended Title III Plan of Adjustment of Puerto Rico Sales Tax Financing Corporation (the "Objection") (Dkt. 4598).

8. I submit this declaration (the "Declaration") in support of my Objection. The scope of my testimony is limited to the specific matters set forth in my Objection, and the additional matters presented herein.

9. <u>The Proposed Settlement is Premature Unless and Until the Issue of "Available Resources" is Decided.</u> The COFINA enabling legislation specifically states that the Dedicated Sales Tax Fund ("SUT") (which secures COFINA bonds) shall not constitute resources available

to the Commonwealth of Puerto Rico. The Plan, though, provides for portions of the SUT to be distributed not only to COFINA bondholders, senior and junior, but to General Obligation ("GO") bondholders in satisfaction of their claims. The Plan, then, is in direct opposition to COFINA's duly enacted enabling legislation. Further, confirmation of the Plan does not solve this issue because the new COFINA bonds would be secured by the same tranche of SUT taxes.

10. An Alternate Plan is Available which Treats COFINA Bondholders Equally. Putting aside the fact that there exists enough revenue to cover all existing COFINA bonds, and since most outstanding COFINA bonds are callable, the Commonwealth could immediately call the existing bonds and then issue new bonds with lower interest rates. The Commonwealth would save money on interest going forward and satisfy 100% of it's outstanding, and constitutional, obligations to COFINA bondholders.

11. The Takings Clause Issue. All COFINA bonds are secured by specific SUT revenue. The proposed treatment of Junior Bondholders (who bought in at par) will essentially strips these bondholders of the bond's value, to the benefit of the Senior and GO bondholders. The newly issued COFINA bonds will suffer from several issues that bear on value, not the least of which is the fact that the new bonds will be secured by the same tranche of SUT revenue as the current bonds. Therefore, the Junior's will in no way be justly compensated for the loss of at least 50% of the bond's face value.

12. The Senior Coalition Did Not, and Does Not, Represent Junior Bondholder Interests. Junior bondholders outnumber Senior bondholders in both numbers and amount invested. Juniors tend to include (prior to the instant litigation) smaller investor groups and island natives, such as the Declarant and Declarant's business. The Senior Coalition's only claim to Junior representation is the fact that many Senior Bondholders also hold positions in Junior Bonds.

However, those holders bought in to Junior bonds only after the instant dispute began and, as a consequence, enjoyed severely discounted prices. The Senior Coalition now enjoys position in Juniors which would ensure a profit even at the Plan's severely discounted rate. The Senior Coalition now proposes a plan which it helped negotiate and which benefits The Senior Coalition (and it's Junior Bondholder contingent) to the disadvantage of Juniors who bought in at par value. The Senior Coalition does not represent the average Junior Bondholder, and the Senior Coalition, by virtue of its position in Junior Bonds, is hopelessly conflicted.

13. Juniors Will Receive Less Than Stated Value. Junior Bonds are currently non-callable for seven (7) years and pays a tax-free yield of 6.75%. If, as proposed, the bond becomes a lower coupon with a (mostly) taxable payout, the value loss would be substantial. As shown in the attached Exhibit 1, assuming a 40% tax rate on the Junior's 54.6 recovery rate, the actual recovery will be below 50% - 48% in fact. See attached **Exhibit 1**, *Bond Value Calculator 74529jhu2 Example JR Calculation Prevent Value Discount.*

14. Seniors will Receive More than Stated Value. As opposed to the Junior calculation above, Senior bondholders stand to gain more than stated in the Plan. In fact, the value is well above par ($1,256.91). Furthermore, this is more than the Seniors would receive if the bonds were called and replaced (see above argument #10 and Objection Point IV, Dkt. # 4598, pg 8-9). See attached **Exhibit 2,** *Bond Value Calculator Srs If Taxable Value.*

15. Seniors Will Benefit by Electing Non-Taxable Status. As currently the case, Senior bonds are taxable. If they were to remain taxable, the value of the yield would be $1,064, a much lower value that if/when they become tax free. See attached **Exhibit 3**, *Bond Value Calculator, What It Should be Trading at Shows Work!*

16. The Plan Contemplates Substantially Higher Yields than Currently Projected. The

attached Exhibit 4 suggests that if the bonds were immediately called at 100% par, the yield would be 2-3% (under normal conditions). The plan, however, calls for yields as high as 6%. The Commonwealth could refinance (see above argument #10 and Objection Point IV, Dkt. # 4598, pg 8-9) and save substantial amounts of money by doing so. See Attached **Exhibit**

MSRB Sr. Coupon Bond Maturing 2020 issued 2011.

Dated: Boston, Massachusetts.
14 January 2019

By: /s/ Mark Elliott
Mark Elliott

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EXHIBIT 1

Bond Value Calculator

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Bond Value Calculator to Calculate and Learn Valuation/Pricing

This free online Bond Value Calculator will calculate the expected trading price o
par value, coupon rate, market rate, interest payments per year, and years-to-ma

Plus, the calculated results will show the step-by-step solution to the bond valua
as a chart showing the present values of the par value and each coupon payme

If you don't know the answer to the questions, "What are bonds?", "How do you
of a bond?", or "How do bonds work?", be sure to visit the Yield to Maturity Cal
includes a basic definition of bonds and a brief explanation of how they work.

Also on this page:

- How to calculate the value of a bond.
- Why do bond prices change?
- Why do bond prices and interest rates move in opposite directions?

Calculator Preferences (Click to change width of calculator)

Bond Value Calculator

Calculate the expected trading price of a bond.

New! Save your entries under the ***Data*** tab.

Data record: None

Load Sample Entries | Reset

Par value ($): 564

Coupon rate (%): 8.125

Bond Value Calculator

Current market rate (%): 11.25

Years to maturity (#): 7

Calculate Bond Price

Bond value: $480.15

Given the current market rate of 11.250% for a similar bond, a bond with a face value of $564.00 and paying a coupon rate of 8.125% (compounding semi-annually), should be selling for $480.15 (selling at a discount). Here is how I arrived at my answer:

Variables
C = coupon payment = $45.83 (Par Value * Coupon Rate)
n = number of years = 7
i = market rate, or required yield = 11.250% = 0.11
k = number of coupon payments in 1 year = 2
P = value at maturity, or par value = 564
Present Value of Ordinary Annuity Formula
$$BP = C/k * \frac{\left[1 - \left[\frac{1}{(1 + i/k)^{nk}}\right]\right]}{i/k} + \frac{P}{(1 + i/k)^{nk}}$$
Plug In The Variables and Solve
$$BP = 46/2 * \frac{\left[1 - \left[\frac{1}{(1 + 0.1125/2)^{7*2}}\right]\right]}{0.1125/2} + \frac{564}{(1 + 0.1125/2)^{7*2}}$$
$$BP = 22.91 * \frac{\left[1 - \left[\frac{1}{(1 + 0.0563)^{14}}\right]\right]}{0.0563} + \frac{564}{(1 + 0.0563)^{14}}$$
$$BP = 22.91 * \frac{\left[1 - \left[\frac{1}{2.151}\right]\right]}{0.0563} + \frac{564}{2.151}$$
$$BP = 22.91 * \frac{1 - 0.4648}{0.0563} + \frac{564}{2.151}$$
$$BP = 22.91 * \frac{0.5352}{0.0563} + 262.15$$
BP = 22.91 * 9.51 + 262.15
BP = 218.00 + 262.15
BP = $480.15

Or Solve Using Spreadsheet

You can also find the bond price using a spreadsheet to calculate and sum the present values of the par value and all of the coupon payments, like this:

End of Year	Interest	Principal	Present Value

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2.00	$22.91		$18.41
2.50	$22.91		$17.43
3.00	$22.91		$16.50
3.50	$22.91		$15.62
4.00	$22.91		$14.79
4.50	$22.91		$14.00
5.00	$22.91		$13.26
5.50	$22.91		$12.55
6.00	$22.91		$11.88
6.50	$22.91		$11.25
7.00	$22.91		$10.65
7.00		$564.00	$262.15
		TOTAL	$480.15

Tap the **Data** tab to save this set of entries to your current web browser so you won't have to start over from scratch on your next visit. Subscribe to the **Ad-Free Cloud Version** to save your entries to a secure online database, allowing you to access your saved entries from any device or web browser.

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If you received value from this calculator, please pay it forward with a Share, Like, Tweet, Pin, or Link. Thank you! -Dan

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Learn: What YTM is, what bonds are, and what makes them difficult to compare to one another.

— Bond Yield to Maturity Calculator

Learn

What bond valuation is and how to calculate the value of a bond.

What is Bond Valuation?

Bond valuation is a method used to determine the expected trading price of a bond.

The expected trading price is calculated by adding the sum of the present values of all coupon payments to the present value of the par value (no worries, the bond value calculator performs all of the calculations for you, and shows its work).

How To Calculate The Value of a Bond

Since the value of a bond is equal to the sum of the present values of the par value and all of the coupon payments, we can use the *Present Value of An Ordinary Annuity Formula* to find the value of a bond.

Bond Valuation Example

Suppose *XYZ* issues ten-year bonds (par value of $1,000.00) with an annual coupon rate of 10% semi-annually. Similar 10-year bonds are paying 12% interest. What is the value of one of *XYZ's* r words, what should the price be?

Variables
C = coupon payment = $100.00 (Par Value * Coupon Rate)
n = number of years = 10
i = market rate, or required yield = 12.000% = 0.12
k = number of coupon payments in 1 year = 2
P = value at maturity, or par value = 1000
Present Value of Ordinary Annuity Formula
$BP = C/k * \frac{\left[1 - \left[\frac{1}{(1 + i/k)^{nk}}\right]\right]}{i/k} + \frac{P}{(1 + i/k)^{nk}}$
Plug In The Variables and Solve
$BP = 100/2 * \frac{\left[1 - \left[\frac{1}{(1 + 0.12/2)^{10*2}}\right]\right]}{0.12/2} + \frac{1000}{(1 + 0.12/2)^{10*2}}$

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Bond Value Calculator

$$(1 + 0.06)^{20}$$

$$BP = 50 * \frac{\left[1 - \left[\frac{1}{3.207}\right]\right]}{0.06} + \frac{1000}{3.207}$$

$$BP = 50 * \frac{1 - 0.3118}{0.06} + \frac{1000}{3.207}$$

$$BP = 50 * \frac{0.6882}{0.06} + 311.80$$

$$BP = 50 * 11.47 + 311.80$$

$$BP = 573.50 + 311.80$$

$$BP = \$885.30$$

Or Solve Using Spreadsheet

You can also find the bond price using a spreadsheet to calculate and sum t
the coupon payments, like this:

End of Year	Interest	Principal	Prese
0.50	$50.00		
1.00	$50.00		
1.50	$50.00		$41.98
2.00	$50.00		$39.60
2.50	$50.00		$37.36
3.00	$50.00		$35.25
3.50	$50.00		$33.25
4.00	$50.00		$31.37
4.50	$50.00		$29.59
5.00	$50.00		$27.92
5.50	$50.00		$26.34
6.00	$50.00		$24.85
6.50	$50.00		$23.44
7.00	$50.00		$22.12
7.50	$50.00		$20.86
8.00	$50.00		$19.68
8.50	$50.00		$18.57
9.00	$50.00		$17.52
9.50	$50.00		$16.53
10.00	$50.00		$15.59
10.00		$1,000.00	$311.80
		TOTAL	$885.30

Why Do Bond Prices Change?

Since the price of bonds trend in the opposite direction of interest rates, the price an investor is wi
tends to decrease as interest rates rise, and increase as interest rates decline. If this sounds conf
a simple example will help clear the air.

Why Bond Prices and Interest Rates Move In Opposite Directions

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you were looking to sell your 7% bond, you would need to discount the price
would achieve the same total return being offered by the bond paying 8%.

Using the bond valuation formula that's built into the bond value calculator,
need to be able to purchase your $1,000 bond for $960.07 in order to get th

On the other hand, **suppose market interest rates fall**, thereby causing bo
coupon rate. If you were looking to sell your 7% bond, your bond is obvious

In this case, using the bond valuation formula we can see that an investor s
bond for $1,042.12, as that price would still net the investor the same total r

Those two examples should help to explain why interest rates have an inver
good thing they have this inverse relationship.

The Function of Price Fluctuations

The underlying reason bond prices rise and fall is to bring the rates of older
not for these price fluctuations there would be no liquidity in the bonds mark
would be willing to buy bonds at par value if the bonds were paying lower in
issuers would not issue bonds if doing so would cause them to pay a higher
money elsewhere.

Maturities and the Effects of Interest Rate Changes

The more you use the bond value calculator, the more it should become cle
rates have on the price of a bond tend to become less and less the closer it
interest rate risk (risk of missing out on higher interest rates) decreases the

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EXHIBIT 2

Bond Value Calculator to Calculate and Learn Valuation/Pricing

This free online Bond Value Calculator will calculate the expected trading price o par value, coupon rate, market rate, interest payments per year, and years-to-ma

Plus, the calculated results will show the step-by-step solution to the bond valuat as a chart showing the present values of the par value and each coupon payme

If you don't know the answer to the questions, "What are bonds?", "How do you of a bond?", or "How do bonds work?", be sure to visit the Yield to Maturity Cal includes a basic definition of bonds and a brief explanation of how they work.

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Bond Value Calculator

Calculate the expected trading price of a bond.

New! Save your entries under the ***Data*** tab.

Data record: None

Load Sample Entries | Reset

Par value ($):	930
Coupon rate (%):	4.875

Bond Value Calculator

Current market rate (%): 2.6

Years to maturity (#): 7

Calculate Bond Price

Bond value: $1,064.61

Given the current market rate of 2.600% for a similar bond, a bond with a face value of $930.00 and paying a coupon rate of 4.875% (compounding semi-annually), should be selling for $1,064.61 (selling at a premium). Here is how I arrived at my answer:

Variables
C = coupon payment = $45.34 (Par Value * Coupon Rate)
n = number of years = 7
i = market rate, or required yield = 2.600% = 0.03
k = number of coupon payments in 1 year = 2
P = value at maturity, or par value = 930
Present Value of Ordinary Annuity Formula
$$BP = C/k * \frac{\left[1 - \left[\frac{1}{(1 + i/k)^{nk}}\right]\right]}{i/k} + \frac{P}{(1 + i/k)^{nk}}$$
Plug In The Variables and Solve
$$BP = 45/2 * \frac{\left[1 - \left[\frac{1}{(1 + 0.0260/2)^{7*2}}\right]\right]}{0.0260/2} + \frac{930}{(1 + 0.0260/2)^{7*2}}$$
$$BP = 22.67 * \frac{\left[1 - \left[\frac{1}{(1 + 0.0130)^{14}}\right]\right]}{0.0130} + \frac{930}{(1 + 0.0130)^{14}}$$
$$BP = 22.67 * \frac{\left[1 - \left[\frac{1}{1.198}\right]\right]}{0.0130} + \frac{930}{1.198}$$
$$BP = 22.67 * \frac{1 - 0.8346}{0.0130} + \frac{930}{1.198}$$
$$BP = 22.67 * \frac{0.1654}{0.0130} + 776.16$$
BP = 22.67 * 12.72 + 776.16
BP = 288.45 + 776.16
BP = $1,064.61

Or Solve Using Spreadsheet

You can also find the bond price using a spreadsheet to calculate and sum the present values of the par value and all of the coupon payments, like this:

End of Year	Interest	Principal	Present Value

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Bond Value Calculator

2.00	$22.67		$21.53
2.50	$22.67		$21.25
3.00	$22.67		$20.98
3.50	$22.67		$20.71
4.00	$22.67		$20.44
4.50	$22.67		$20.18
5.00	$22.67		$19.92
5.50	$22.67		$19.67
6.00	$22.67		$19.41
6.50	$22.67		$19.16
7.00	$22.67		$18.92
7.00		$930.00	$776.16
		TOTAL	$1,064.61

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If you received value from this calculator, please pay it forward with a Share, Like, Tweet, Pin, or Link. Thank you! -Dan

Like 141 Share Save 8 Tweet

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Variables
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n = number of years = 10
i = market rate, or required yield = 12.000% = 0.12
k = number of coupon payments in 1 year = 2
P = value at maturity, or par value = 1000
Present Value of Ordinary Annuity Formula
$BP = C/k * \frac{\left[1 - \left[\frac{1}{(1 + i/k)^{nk}}\right]\right]}{i/k} + \frac{P}{(1 + i/k)^{nk}}$
Plug In The Variables and Solve
$BP = 100/2 * \frac{\left[1 - \left[\frac{1}{(1 + 0.12/2)^{10*2}}\right]\right]}{0.12/2} + \frac{1000}{(1 + 0.12/2)^{10*2}}$

Bond Value Calculator

$$BP = 50 * \frac{\left[1 - \left[\frac{1}{3.207}\right]\right]}{0.06} + \frac{1000}{3.207}$$

$$BP = 50 * \frac{1 - 0.3118}{0.06} + \frac{1000}{3.207}$$

$$BP = 50 * \frac{0.6882}{0.06} + 311.80$$

$$BP = 50 * 11.47 + 311.80$$

$$BP = 573.50 + 311.80$$

$$BP = \$885.30$$

Or Solve Using Spreadsheet

You can also find the bond price using a spreadsheet to calculate and sum t
the coupon payments, like this:

End of Year	Interest	Principal	Prese
0.50	$50.00		
1.00	$50.00		$44.50
1.50	$50.00		$41.98
2.00	$50.00		$39.60
2.50	$50.00		$37.36
3.00	$50.00		$35.25
3.50	$50.00		$33.25
4.00	$50.00		$31.37
4.50	$50.00		$29.59
5.00	$50.00		$27.92
5.50	$50.00		$26.34
6.00	$50.00		$24.85
6.50	$50.00		$23.44
7.00	$50.00		$22.12
7.50	$50.00		$20.86
8.00	$50.00		$19.68
8.50	$50.00		$18.57
9.00	$50.00		$17.52
9.50	$50.00		$16.53
10.00	$50.00		$15.59
10.00		$1,000.00	$311.80
		TOTAL	$885.30

Why Do Bond Prices Change?

Since the price of bonds trend in the opposite direction of interest rates, the price an investor is wi
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Why Bond Prices and Interest Rates Move In Opposite Directions

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you were looking to sell your 7% bond, you would need to discount the price
would achieve the same total return being offered by the bond paying 8%.

Using the bond valuation formula that's built into the bond value calculator,
need to be able to purchase your $1,000 bond for $960.07 in order to get th

On the other hand, **suppose market interest rates fall**, thereby causing bo
coupon rate. If you were looking to sell your 7% bond, your bond is obvious

In this case, using the bond valuation formula we can see that an investor s
bond for $1,042.12, as that price would still net the investor the same total r

Those two examples should help to explain why interest rates have an inver
good thing they have this inverse relationship.

The Function of Price Fluctuations

The underlying reason bond prices rise and fall is to bring the rates of older
not for these price fluctuations there would be no liquidity in the bonds mark
would be willing to buy bonds at par value if the bonds were paying lower in
issuers would not issue bonds if doing so would cause them to pay a higher
money elsewhere.

Maturities and the Effects of Interest Rate Changes

The more you use the bond value calculator, the more it should become cle
rates have on the price of a bond tend to become less and less the closer it
interest rate risk (risk of missing out on higher interest rates) decreases the

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Bond Value Calculator

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Bond Value Calculator to Calculate and Learn Valuation/Pricing

This free online Bond Value Calculator will calculate the expected trading price o
par value, coupon rate, market rate, interest payments per year, and years-to-ma

Plus, the calculated results will show the step-by-step solution to the bond valua
as a chart showing the present values of the par value and each coupon payme

If you don't know the answer to the questions, "What are bonds?", "How do you
of a bond?", or "How do bonds work?", be sure to visit the Yield to Maturity Cal
includes a basic definition of bonds and a brief explanation of how they work.

Also on this page:

- How to calculate the value of a bond.
- Why do bond prices change?
- Why do bond prices and interest rates move in opposite directions?

Calculator Preferences (Click to change width of calculator)

Bond Value Calculator

Calculate the expected trading price of a bond.

New! Save your entries under the ***Data*** tab.

Data record: None

Load Sample Entries | Reset

Par value ($): 930

Coupon rate (%): 8.125

Bond Value Calculator

Current market rate (%): 2.6

Years to maturity (#): 7

Calculate Bond Price

Bond value: $1,256.91

Given the current market rate of 2.600% for a similar bond, a bond with a face value of $930.00 and paying a coupon rate of 8.125% (compounding semi-annually), should be selling for $1,256.91 (selling at a premium). Here is how I arrived at my answer:

Variables
C = coupon payment = $75.56 (Par Value * Coupon Rate)
n = number of years = 7
i = market rate, or required yield = 2.600% = 0.03
k = number of coupon payments in 1 year = 2
P = value at maturity, or par value = 930
Present Value of Ordinary Annuity Formula
$$BP = C/k * \frac{\left[1 - \left[\frac{1}{(1 + i/k)^{nk}}\right]\right]}{i/k} + \frac{P}{(1 + i/k)^{nk}}$$
Plug In The Variables and Solve
$$BP = 76/2 * \frac{\left[1 - \left[\frac{1}{(1 + 0.0260/2)^{7*2}}\right]\right]}{0.0260/2} + \frac{930}{(1 + 0.0260/2)^{7*2}}$$
$$BP = 37.78 * \frac{\left[1 - \left[\frac{1}{(1 + 0.0130)^{14}}\right]\right]}{0.0130} + \frac{930}{(1 + 0.0130)^{14}}$$
$$BP = 37.78 * \frac{\left[1 - \left[\frac{1}{1.198}\right]\right]}{0.0130} + \frac{930}{1.198}$$
$$BP = 37.78 * \frac{1 - 0.8346}{0.0130} + \frac{930}{1.198}$$
$$BP = 37.78 * \frac{0.1654}{0.0130} + 776.16$$
BP = 37.78 * 12.72 + 776.16
BP = 480.75 + 776.16
BP = $1,256.91

Or Solve Using Spreadsheet

You can also find the bond price using a spreadsheet to calculate and sum the present values of the par value and all of the coupon payments, like this:

End of Year	Interest	Principal	Present Value

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Bond Value Calculator

2.00	$37.78		$35.88
2.50	$37.78		$35.42
3.00	$37.78		$34.96
3.50	$37.78		$34.52
4.00	$37.78		$34.07
4.50	$37.78		$33.63
5.00	$37.78		$33.20
5.50	$37.78		$32.78
6.00	$37.78		$32.36
6.50	$37.78		$31.94
7.00	$37.78		$31.53
7.00		$930.00	$776.16
		TOTAL	$1,256.91

Tap the **Data** tab to save this set of entries to your current web browser so you won't have to start over from scratch on your next visit. Subscribe to the **Ad-Free Cloud Version** to save your entries to a secure online database, allowing you to access your saved entries from any device or web browser.

Reset

If you received value from this calculator, please pay it forward with a Share, Like, Tweet, Pin, or Link. Thank you! -Dan

Like 141 Share Save 8 Tweet

<a href="https://www.free-online-calculator-use.com/bond-value-calcula

Your Feedback Would Be Greatly Appreciated

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Other Related Articles

Learn: What weighted average is, how to calculate it, and how it compares to simple average.

— Stock Shares Outstanding Calculator

Think: Emotional Vs Monetary Wealth

— Millionaire Calculator

Learn: What YTM is, what bonds are, and what makes them difficult to compare to one another.

— Bond Yield to Maturity Calculator

Learn

What bond valuation is and how to calculate the value of a bond.

What is Bond Valuation?

Bond valuation is a method used to determine the expected trading price of a bond.

The expected trading price is calculated by adding the sum of the present values of all coupon payments to the present value of the par value (no worries, the bond value calculator performs all of the calculations for you, and shows its work).

How To Calculate The Value of a Bond

Since the value of a bond is equal to the sum of the present values of the par value and all of the coupon payments, we can use the *Present Value of An Ordinary Annuity Formula* to find the value of a bond.

Bond Valuation Example

Suppose *XYZ* issues ten-year bonds (par value of $1,000.00) with an annual coupon rate of 10% semi-annually. Similar 10-year bonds are paying 12% interest. What is the value of one of *XYZ's* r words, what should the price be?

Variables
C = coupon payment = $100.00 (Par Value * Coupon Rate)
n = number of years = 10
i = market rate, or required yield = 12.000% = 0.12
k = number of coupon payments in 1 year = 2
P = value at maturity, or par value = 1000
Present Value of Ordinary Annuity Formula
$BP = C/k * \frac{\left[1 - \left[\frac{1}{(1 + i/k)^{nk}}\right]\right]}{i/k} + \frac{P}{(1 + i/k)^{nk}}$
Plug In The Variables and Solve
$BP = 100/2 * \frac{\left[1 - \left[\frac{1}{(1 + 0.12/2)^{10*2}}\right]\right]}{0.12/2} + \frac{1000}{(1 + 0.12/2)^{10*2}}$

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$$(1 + 0.06)^{20}$$

$$BP = 50 * \frac{\left[1 - \left[\frac{1}{3.207}\right]\right]}{0.06} + \frac{1000}{3.207}$$

$$BP = 50 * \frac{1 - 0.3118}{0.06} + \frac{1000}{3.207}$$

$$BP = 50 * \frac{0.6882}{0.06} + 311.80$$

$$BP = 50 * 11.47 + 311.80$$

$$BP = 573.50 + 311.80$$

$$BP = \$885.30$$

Or Solve Using Spreadsheet

You can also find the bond price using a spreadsheet to calculate and sum t
the coupon payments, like this:

End of Year	Interest	Principal	Prese
0.50	$50.00		
1.00	$50.00		
1.50	$50.00		$41.98
2.00	$50.00		$39.60
2.50	$50.00		$37.36
3.00	$50.00		$35.25
3.50	$50.00		$33.25
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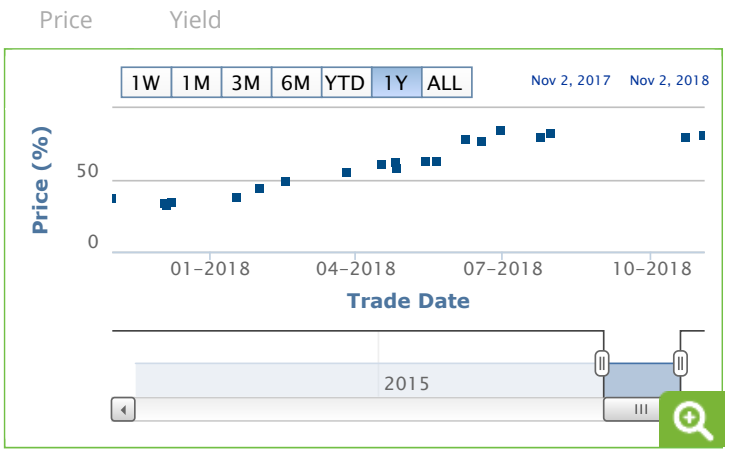
Security Details

CUSIP: 74529JNM3*

PUERTO RICO SALES TAX FINANCING CORPORATION SALES TAX REVENUE BONDS, SENIOR SERIES 2011C CURRENT INTEREST BOND

PUERTO RICO SALES TAX FING CORP SALES TAX REV SER C (PR)*

Coupon:	**4 %**
Maturity Date:	**08/01/2020**
Dated Date:	12/13/2011
Initial Offering Price/Yield:	107.16%
Principal Amount at Issuance:	$3,405,000
Closing Date:	12/13/2011



Trade Activity | Ratings | Disclosure Documents | Final Scale | Compare

View real-time price and yield information for trades in this security.

Trade Summary | Trade Details | Search Trades

Display 10 results | Search within list: | First | Previous | 1 | ... | 5 | 6 | 7 | 8 | 9 | Next | Last

	Trade Date	High/Low Price (%)	High/Low Yield (%)	Trade Count	Total Trade Amount ($)
⊕	06/14/2012	111.866 / 111.866	2.383 / 2.383	1	1,420,000
⊕	02/02/2012	114.609 / 114.192	2.16 / 2.11	2	400,000
⊕	02/01/2012	113.541 / 113.541	2.239 / 2.239	1	200,000
⊕	12/14/2011	111.396 / 109.896	2.704 / 2.52	2	20,000
⊕	12/12/2011	109.07 / 108.57	2.871 / 2.809	2	20,000
⊕	12/01/2011	107.16 / 106.66	3.113 / 3.05	20	3,640,000

Displaying 81 to 86 of 86 results | First | Previous | 1 | ... | 5 | 6 | 7 | 8 | 9 | Next | Last